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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/728,890	12/08/2003	Francois Cottard	06028.0031-00	9673
22852	7590	11/29/2005	EXAMINER	
FINNEGAN, HENDERSON, FARABOW, GARRETT & DUNNER LLP 901 NEW YORK AVENUE, NW WASHINGTON, DC 20001-4413			ELHILO, EISA B	
			ART UNIT	PAPER NUMBER
			1751	

DATE MAILED: 11/29/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/728,890

Applicant(s)

COTTARD ET AL.

Examiner

Eisa B. Elhilo

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 08 December 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-94 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-94 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
  - 2) ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 5/10/2004.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

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Claims 1-94 are pending in this application.

### **DETAILED ACTION**

#### ***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.

Claim 29 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 29 recites the limitation "at least one associative polymer is an anionic fatty chain associative polymer and is chosen from (1)..., (2)..., (3)..., (4)..., (5)...,(6)... and (7)..." .

There is insufficient antecedent basis for this limitation in the claim because these polymers are recited under non-ionic fatty chain associative polymers (see specification at page 11, paragraph, 043).

#### ***Claim Rejections - 35 USC § 102***

- 2 The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-4, 16-35, 47-49, 53-73 and 75-94 are rejected under 35 U.S.C. 102(b) as being anticipated by Cottard et al. (US 2001/0023514).

Cottard et al. (US' 514 A1) teaches a composition for oxidation dyeing of hair comprising oxidation bases chosen from para-phenylenediamines of a formula (I) as claimed in

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claims 1-3 and 53-57 (see page 6, formula I), double bases of a formula (II) as claimed in claims 58-59 (see page 6, formula II), para-aminophenols of a formula (III) as claimed in claims 60-61 (see page 7, formula III), heterocyclic bases as claimed in claim 62 (see page 7, paragraph, 0140), fatty alcohols (see page 17, paragraph, 0347) and oxyethylenated fatty acid esters of glycol distearate in the amounts of 2% which within the claimed amounts as claimed in claims 1, 4-9 and 14-15 (see page 16, paragraph, 0324), wherein the oxidation bases are presented in the claimed amounts as claimed in claims 63-64 (see page 8, paragraph, 0160), couplers chosen from meta-phenylenediamines presented in the claimed amounts as claimed in claims 65-67 (see page 8, paragraphs, 0162 and 0163), acid addition salts of chosen from hydrochlorides and hydrobromides as claimed in claim 68 (see page 8, paragraph, 0164), direct dyes as claimed in claim 69 (see page 8, paragraph, 0164), polyglycerolated and oxyalkylenated fatty alcohols as claimed in claims 71-72 (see page 2, paragraphs, 0033-0037), wherein the fatty alcohols are presented in the amount of 0.5 to 20% by weight which within the claimed range as claimed in claim 73 (see page 2, paragraph, 0039), at least one associative polymer of fatty chain chosen from anionic and nonionic polymers, acrylic terpolymer and copolymers as claimed in claims 16-28 and 31-32 (see page, 2, paragraph, 0044, page 3, paragraphs, 0050-0057, page 4, paragraphs, 0065-0088 and page 5, paragraph, 0089-0090), wherein the associative polymers are presented in the claimed amounts as claimed in claims 47-48 (see page 5, paragraph, 0108), wherein the associative polymer is chosen from quaternized cellulose modified with fatty chain as claimed in claim 29 (see page 4, paragraphs, 0077), associative polymer of polyurethane polyethers as claimed in claim 30 (see page 4, paragraph, 0088), wherein the associative polymer is cationic polymer comprising at least one fatty chain such as quaternized hydroxyethylcellulose as

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claimed in claims 33-35 and 49 (see page 5, paragraphs, 0099-0103), substantive polymers such as homopolymer of dimethyldiallylammonium chloride as claimed in claims 75-76 (see page 10, paragraph, 0206), wherein the substantive polymer is a quaternary polyammonium polymers as claimed in claims 77-78 (see page 12, paragraphs, 0242 and 0243), substantive polymer in the claimed amounts as claimed in claims 79-81 (see page 12, paragraph, 0245), surfactants in the amounts of 0.01 to 40% as claimed in claims 82-85 (see page 17, paragraph, 0339), guar gum thickeners in the amounts of 0.01 to 10% as claimed in claims 86-88 (see page 17, paragraphs, 0340 and 0341), reducing agent in the amounts of 0.05 to 1.5 % as claimed in claim 89 (see page 17, paragraph, 0346), wherein the composition is a ready-to use composition as claimed in claim 90 (see page 17, paragraph, 0348), wherein the composition also comprises hydrogen peroxide in the amount of 1 to 40 volumes as an oxidizing agent as claimed in claim 91-93 (see page 17, paragraph, 0349), wherein the composition has a pH in the range of 6-11, wherein the range falls within the claimed range as claimed in claim 94 (see page 18, paragraph, 0351). Cottard et al. (US' 514 A1) teaches all the limitations of the instant claims. Hence, the claims are anticipated by Cottard et al. (US' 514 A1).

***Claim Rejections - 35 USC § 103***

3        The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 74 is rejected under 35 U.S.C. 103(a) as being unpatentable over Cottard et al. (US 2001/0023514 A1).

Cottard et al. (US' 514 A1) teaches a composition for oxidation dyeing of hair comprising oxidation bases (see page 6, formula I), fatty alcohols (see page 17, paragraph, 0347), associative polymer of fatty chain chosen from anionic and nonionic polymers, (see page, 2, paragraph, 0044, page 3, paragraphs, 0050-0057, page 4, paragraphs, 0065-0088 and page 5, paragraph, 0089-0090) and fatty acid esters (see page 16, paragraph, 0324).

The instant claims differ from the reference by reciting fatty alcohol in the percentage amount of 0.5 to 20 % as claimed.

However, it would have been obvious to one having ordinary skill in the art at the time the invention was made to formulate such a dyeing composition to arrive at the claimed invention because the reference clearly teaches a composition comprising fatty alcohols in the amounts of 0.05 to 20% (see page 2, paragraph, 0039), wherein the amount of fatty alcohols in the prior art composition is overlapped with the claimed amounts, and, thus, a person of the ordinary skill in the art would be motivated to optimize the amount of fatty alcohols in the composition so as to get the maximum effective amount. The person of ordinary skill in the art would expect such a composition to have similar properties to those claimed, absent unexpected results.

4      Claims 10-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cottard et al. (US 2001/0023514 A1) in view of Eteve et al. (US 5,788,955).

The disclosure of Cottard et al. (US' 514 A1) as described above, does not teach or disclose the claimed metal oxides.

However, Cottard et al. (US' 514 A1) clearly suggests the use of minerals in a hair dyeing composition (see page 17, paragraph, 0345).

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Eteve et al. (US' 955) in analogous art of hair dyeing formulation, teaches a composition comprising coated titanium oxides as claimed in claims 10-12 (see col. 2, lines 53-55) and uncoated titanium oxides as claimed in claim 13 (see col. 3, lines 39). It is further taught by Eteve et al. (US' 955) that the dyeing composition protecting hair against ultraviolet rays (see col. 12, claim 10).

Therefore, in view of the teaching of the secondary reference, one having ordinary skill in the art at the time the invention was made would be motivated to modify the dyeing composition of Cottard et al. (US' 514 A1) by incorporating the mineral of titanium oxides as taught by Eteve et al. (US' 955) to make such a composition. Such a modification would be obvious because Cottard et al. (US' 514 A1) as a primary reference suggests the use of minerals in the hair dyeing composition (see page 17, paragraph, 0345). Eteve et al. (US' 955) as a secondary reference clearly teaches a dyeing composition comprising titanium oxides as claimed (see col. 2, lines 53-55 and col. 3, lines 39), and, thus, a person of the ordinary skill in the art would be motivated to incorporate titanium oxides as taught by Eteve et al. (US' 955) in the dyeing composition of Cottard et al. (US' 514 A1) with a reasonable expectation of success for protecting hair from ultraviolet rays during dyeing application, and would expect such a composition to have similar properties to those claimed, absent unexpected results.

5        Claims 36-46 and 50 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cottard et al. (US 2001/0023514 A1) in view of Laurent et al. (US 2002/0046431 A1).

The disclosures of Cottard et al. (US' 514 A1) as described above, does not teach or disclose the cationic amphiphilic polyurethane polymers as claimed.

However, Cottard et al. (US' 514 A1) clearly suggests the use of associative cationic polymers such as quaternized cellulose in the dyeing composition (see page 5, paragraph, 0099).

Laurent et al. (US' 431 A1) in analogous art of hair dyeing formulation, teaches a composition comprising a cationic polyurethane of a formula (Ia), which is similar to the claimed formula (Ia) as claimed in claims 36-39 and 50 (see page 3, paragraphs, 0096-0105), wherein the monomer comprises 0.1 to 10% by weight as claimed in claim 40 (see page 8, paragraph, 0202), wherein the cationic amphiphilic polyurethane comprises monomers chosen from formulae (Ib) and (IIb) as claimed in claim 41 (see page 6, paragraph, 0157), wherein the monomer chosen from a monomer dimethylaminopropyl-methacrylamide and acrylamidopropyltrimethylammonium chloride as claimed in claims 42-43 (see page 7, paragraph, 0191 and page, 18, paragraph, 0402), wherein the monomer chosen from acrylic acid, methacrylic acid as claimed in claim 44 (see page 8, paragraph, 0208) and wherein the monomer chosen from (C<sub>10</sub>-C<sub>30</sub>)alkyl acrylates as claimed in claims 45-46 (see page 8, paragraph, 0211).

Therefore, in view of teaching of the secondary reference, one having ordinary skill in the art at the time the invention was made would be motivated to modify the composition of Cottard et al. (US' 514 A1) by incorporating the cationic polyurethane as taught by Laurent et al. (US' 431 A1) to make such a composition. Such a modification would be obvious because Cottard et al. (US' 514 A1) as a primary reference clearly suggests the use of cationic polymers in a hair dyeing composition (see page 8, paragraph, 0167). Laurent et al. (US' 431 A1) as a secondary reference clearly teaches the claimed cationic polyurethane polymers as claimed, and, thus, a person of the ordinary skill in the art would be motivated to incorporate these polyurethane polymers as taught by Laurent et al. (US' 431 A1) in the dyeing composition of Cottard et al.



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(US' 514 A1) with a reasonable expectation of success to arrive the claimed invention and would expect such a composition to have similar properties to those claimed, absent unexpected results. With respect to claims 51-52, it would have been obvious to one having ordinary skill in the art at the time the invention was made to formulate a dyeing composition comprising associative polymers, fatty alcohols, fatty acid esters and metal oxides with the claimed ratio, because Cottard et al. (US' 514 A1) clearly teaches and discloses the amounts of cationic polymers (see page 12, paragraph, 0245), the amounts of associative polymers (see page 16, paragraph, 0315), fatty alcohols and fatty acid esters in the claimed amounts (see page 19, paragraph, 0371). Eteve et al. (US' 955) teaches metal oxides in the amounts of 0.1 to 10% and 0.25 to 5% (see col. 3, lines 56-64), and, thus a person of the ordinary skill would be motivated to optimize the ratio of these dyeing ingredients in order to get the maximum effective amounts of these ingredients in the dyeing composition and expect such a composition to have similar properties to those claimed, absent unexpected results.

### ***Conclusion***

6 The remaining references listed on from 1449 have been reviewed by the examiner and are considered to be cumulative to or less material than the prior art references relied upon in the rejection above.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eisa B. Elhilo whose telephone number is (571) 272-1315. The examiner can normally be reached on M - F (8:00 -5:30) with alternate Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Yogendra Gupta can be reached on (571) 272-1316. The fax phone number for the

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organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Eisa Elhilo  
Primary Examiner  
Art Unit 1751

November 23, 2005